

Application No.: 10/623,011

Docket No.: NGW-009RCE2

REMARKS

Applicants amend claims 1 and 4. Claims 3 and 6 are canceled. Subject matter of claims 3 and 6 are incorporated in claims 1 and 4, respectively. No new matter is added. Upon entry of this amendment, claims 1, 2, 4, 5, 7 and 8 are pending, of which claims 1 and 4 are independent. Applicants respectfully submit that the pending claims define over the art of record.

Claim Rejections under 35 U.S.C. §102/103

Claims 1-8 are rejected under 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,461,751 to Boehm (hereafter "Boehm").

Applicants amend independent claim 1 to recite that the operating state detecting unit includes a pressure detector for detecting the pressure of the reaction gases supplied to the anode and the cathode, a flow rate detector for detecting the flow rate of the reaction gases supplied to the anode and the cathode and a current controller for detecting a generated current of the fuel cell. Similarly, Applicants amend independent claim 4 to recite that the step of detecting an operating step includes detecting a pressure of the reaction gases supplied to the anode and the cathode, a flow rate of the reaction gases supplied to the anode and the cathode, and a generated current of the fuel cell. Applicants respectfully submit that the Boehm reference does not disclose, teach or suggest these features.

The Boehm reference teaches monitoring a cathode exhaust stream to detect the hydrogen gas concentration, and then decreasing oxidant stoichiometry when the hydrogen gas concentration is less than a first threshold concentration. See Col. 5, lines 3-7. The Boehm reference further teaches that the predetermined range and threshold value depend upon the particular characteristics and operating conditions of each particular fuel cell or fuel cell stack. See Col. 8, lines 17-20.

The Examiner indicates that the controller (105) of the Boehm reference is equivalent to the operating state detecting unit recited in claim 1. See Office Action, page 3, paragraph 3. However, amended claim 1 recites *a control unit* separately from an *operating state detecting unit*. The Boehm reference does not disclose, teach or suggest *an operating state detecting unit*.

Application No.: 10/623,011

Docket No.: NGW-009RCE2

*including a pressure detector for detecting the pressure of the reaction gases supplied to the anode and the cathode, a flow rate detector for detecting the flow rate of the reaction gases supplied to the anode and the cathode and a current controller for detecting a generated current of the fuel cell, as required by amended claims 1 and 4.*

The Examiner also indicates that the Boehm reference teaches controlling the fuel stream pressure so that it is less than or equal to the pressure of the oxidant stream. See Col. 6, lines 13-15. However, the Boehm reference does not expressly teach *a pressure detector for detecting the pressure of the reaction gases supplied to the anode and the cathode, a flow rate detector for detecting the flow rate of the reaction gases supplied to the anode and the cathode and, a current controller for detecting a generated current of the fuel cell, as required by amended claims 1 and 4.*

Claim 2 depends from claim 1. Claims 5, 7 and 8 depend from claim 4. Dependent claims incorporate each and every element of the independent claim upon which they depend. Applicants respectfully submit that the Boehm reference does not disclose, teach or suggest each and every element of claims 1, 2, 4, 5, 7 and 8. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 1, 2, 4, 5, 7 and 8 under 35 U.S.C. §102(e), or in the alternative under 35 U.S.C. § 103(a).

RECEIVED  
CENTRAL FAX CENTER

012/012

Application No.: 10/623,011

OCT 30 2007

Docket No.: NGW-009RCE2

**CONCLUSION**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. NGW-009RCE2. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. § 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

Dated: October 30, 2007

Respectfully submitted,

By   
Anthony A. Laurentano  
Registration No.: 38,220  
LAHIVE & COCKFIELD, LLP  
One Post Office Square  
Boston, Massachusetts 02109-2127  
(617) 227-7400  
(617) 742-4214 (Fax)  
Attorney/Agent For Applicant